

### **REMARKS**

Favorable reconsideration of the subject application is respectfully requested in view of the above amendments and the following remarks. Claims 35-71 are pending in the subject application, with Claims 35-37 being in independent format. This Amendment and Reply to the Office Action, mailed December 6, 2005, is being filed with a 1-month extension of time fee payment, therefore extending the response period to April 6, 2006.

Claims 14-34 have been previously canceled. Claims 35 and 36 have been amended to recite water-based crop protection compositions. Claims 38-48 are drawn to subject matter recited in previously canceled Claims 17-20, 23, and 27-32, and depend from amended Claim 35. Claims 49-59 are drawn to subject matter recited in previously canceled Claims 17-20, 23, and 27-32, and depend from amended Claim 36. Allowable Claims 60-71 are drawn to subject matter recited in previously canceled Claims 17-20, 23, 24, and 27-32, and depend from allowable Claim 37.

It is urged that support for all the above amendments may be found throughout the specification as originally filed and that none of the amendments constitute new matter or give rise to prosecution history estoppel.

#### ***Claim Rejections – 35 U.S.C. §112, second paragraph***

The Examiner has rejected Claims 41 and 44 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, the Examiner states that Claims 41 and 44 recite the limitation "said surfactant" and that there is insufficient antecedent basis for this limitation in the claims. This rejection is respectfully traversed.

Applicants submit that there is sufficient antecedent basis for the limitation "said surfactant" in Claims 41 and 44. Claims 41 and 44 both depend from Claim 35 and section (c) of Claim 35 recites "...at least one surfactant comprising an ethoxylated tridecanol having 5 to 13 ethoxy units...". The Examiner is invited to review Claims 35, 41, and 44. Nevertheless, Applicants have amended Claim 44 by adding the phrase "at least one" prior to the term "surfactant".

Applicants respectfully submit that Claims 41 and 44 clearly point out and distinctly claim the subject matter which applicants regard as the invention. It is urged that the claim rejections under 35 U.S.C. §112, second paragraph, may thus be properly withdrawn.

***Claim Rejections – 35 U.S.C. §103(a)***

Claims 35, 36, and 38-59 under 35 U.S.C. §103(a) are rejected as being unpatentable over *Murphy et al.* (U.S. Patent No. 5,658,851). This rejection is respectfully traversed, particularly in view of the above amendments and the following remarks.

Applicants wish to point out that in the Final Office Action mailed May 5, 2005 and the Advisory Action mailed September 29, 2005, the Examiner indicated that Claims 35 and 36 were allowable.

In the present office action, the Examiner states that *Murphy et al.* teaches novel oil based agricultural adjuvant compositions comprising lipophilically modified silicone, an oil carrier, and a water insoluble pesticide and that the silicone/oil composition gives improved spreading properties relative to the carrier oil alone. The Examiner also states that *Murphy et al.* teaches that 0.1 to about 2.5% silica fillers such as Tullanox (silicon dioxide) or Aerosil (silica gel) and 1-50% nonionic surfactants (auxiliaries) such as tridecyl alcohol ethoxylate can be added to the composition. The Examiner further states that *Murphy et al.* teaches that pesticides such as phenmedipham (biscarbamate) and desmedipham (biscarbamate) can be added to the composition. The Examiner alleges that it would have been obvious to one having ordinary skill in the art to add the optional ingredients, Aerosil or Tullanox plus phenmedipham or desmedipham plus tridecyl alcohol ethoxylate, to the silicone/oil component and that one would have been motivated to do this in order to enhance the spreading of the actives, phenmedipham and desmedipham, on the plants. The Examiner further alleges that it would have been obvious to one having ordinary skill in the art to determine the optimum surface area of the silica gel, and optimum amount of herbicide and the optimum particle size of the actives and auxiliaries and that one would have been motivated to do this to assure that the composition would spread effectively on the plant when applied thereto.

Applicants submit that *Murphy et al.* teaches certain organosilicone compounds that are considered useful as agricultural adjuvants with carrier oils. These adjuvants are intended to be used in combination with oil-based agricultural chemicals to improve their ability to spread (*see* col. 1, lines 8-19 and col. 4, lines 2-6).

*Murphy et al.* discusses that oil-based agricultural chemicals generally contain petroleum or vegetable oils (col. 1, lines 20-22) and teaches carrier oils comprising oils and mixtures thereof, for example, paraffinic mineral oils, vegetable oils and methylated oils (*se* col. 3, lines 19-25). *Murphy et al.* also discloses that paraffinic, aromatic-based mineral oils, animal or vegetable oils, or water insoluble pesticide may act as carrier oils (*see* col. 1, lines 60-62). In addition, as disclosed in Examples 2-5, *Murphy et al.* teaches that mineral oil, methylated soybean oil, soybean oil are used as oil carriers.

The adjuvant compositions as taught by *Murphy et al.* include modified organosilicone and an oil carrier as the two main ingredients (*see* col. 1, lines 56-62). The adjuvant compositions described in Examples 2-5 of *Murphy et al.* were obtained by mixing an organosilicone with a suitable amount of carrier oil (e.g. a 1:1 mixture, as described in Example 2). These adjuvant compositions were prepared without water. Thus, these adjuvant compositions are 'oil-based compositions' or "oil compositions".

In contrast, as stated in the specification as filed (page 2, paragraphs 2-4), oil-based herbicide preparations are generally disadvantageous as they require relatively high proportions of additives or bioactivators such as oils and surfactants in order to be sufficiently active. It was the object of the present invention to overcome the shortcomings associated with prior art crop protection compositions, such as oil-based compositions. All of the suspension concentrates as described in the specification as filed were prepared without adding an oil component. Furthermore, as described in Example 4, a suspension concentrate was compared to approved emulsion concentrates (Betanal), and it was found that the herbicidal activity was substantially improved when the composition according to the present invention was employed (*see also* Example 5 on p. 15). The term "emulsion concentrate" implies that the prior art compositions "Betanal" were oil-containing or oil-based compositions. Applicants respectfully reiterate that it

was not the object of the present invention to provide oil-based compositions as taught by *Murphy et al.*

Furthermore, none of the examples taught by *Murphy et al.* describes a composition containing an active ingredient, and it remains unknown whether the “spreading effect” asserted by *Murphy et al.* (Examples 2-6) would have any significant effect on herbicidal activity under practical conditions. Therefore, applicants doubt whether the teachings of *Murphy et al.* can be considered enabling as far as active substance-containing crop protection compositions are concerned.

Applicants also submit that the “ethoxylated castor oil”, as disclosed on in table 7, page 16 of the applicants’ specification, in terms of its chemical structure, is not an “oil”, but rather a surfactant or wetting agent, as described on page 4, 2nd paragraph, lines 1-7 of the specification. Applicants further submit that a “castor oil” contains mainly of the triglyceride of ricinolic acid, which is a fatty acid, and therefore, is rather non-polar and belongs to the chemical group of fats or oils. However, an “ethoxylated castor oil” contains ethoxy groups introduced via ethoxylation, and therefore, is rather polar and does not have the characteristics of an oil.

Accordingly, Claims 35 and 36 have been amended to recite water-based crop protection compositions. *Murphy et al.* fails to disclose an aqueous suspension concentrate that is substantially free of oil. *Murphy et al.* teaches the use of a carrier oil in which the active substance (herbicide) is dissolved or dispersed. Therefore, the carrier oils described by *Murphy et al.* cannot be used for formulating the aqueous suspension concentrate as taught by applicants’ invention. Accordingly, Claims 35 and 36 cannot be obvious in view of *Murphy et al.*

It is urged that *Murphy et al.* would not render Claims 35, 36, and 38-59 obvious to one of skill in the art, and that the present rejection of the claims under 35 U.S.C. §103(a) may be properly withdrawn.

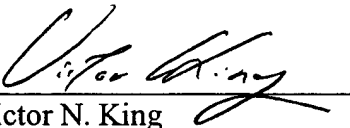
#### ***Allowable Subject Matter***

The Examiner states that Claims 37, 60-71 are allowable because the prior art does not teach or suggest the instant invention comprising ethofumesate or metamitorn.

***Conclusion***

In view of the above amendments and remarks, applicants believe that they have addressed all of Examiner's concerns. Early consideration and allowance of all the pending claims is respectfully requested.

Respectfully submitted,

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Date: April 6, 2006  
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